THE GENESEE FARMER.

VOL. IX. ROCHESTER, N. Y. MARCH 16, 1839. NO. 11.

PUBLISHED BY LUTHER TUCKER.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2 50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July1. No subscriptiontaken for less than six months.

☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with the Title-page and index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*—Eleven copies for Five Dollars.

THE GENESEE FARMER.

SATURDAY, MARCH 16, 1839.

GRAIN WORM.

We comply with pleasure, with the request of our friend, the conductor of the 'Cultivator,' in giving an account of the worm which has appeared in Western New York, and which has excited such serious apprehensions. It is very desirable that it should be ascertained whether this new enemy of the wheat crop is the same in the Genesee Valley that it is in that of the Hudson, or whether more than one kind of worm is concerned in these depredations.

The worm which is called the wheat worm in Western New York belongs to the genus *Phalæno* of Latreille, *Gsometridæ* of Stephens, and embraces about eighty genera. This class of worms is usually called surveyor, carpenter, or measuring worm, from the manner in which their movements are effected. The num- of legs varies in the several kinds, but in the wheat worm there are six pair, three at each extremity. Like most other worms of this genus it has the power of spinning a web, as may be seen from the faculty with which they attach themselves when disturbed to straws, sides of the threshing floors, fanning mills, &c. It varies in length from three to five-eighths, and some may possibly a little exceed the latter measure. Between three-eighths and half an inch, may be be considered the average length. The color is very uniform; a *yellowish brown*, or what among farmers would perhaps be termed *butternut color*. That it is the larvæ of a fly or moth, cannot be doubted, but of what particular kind does not seem as yet to be conclusively ascertained. This worm has been known among wheat for years in this part of the state; its increasing numbers has created the present alarm respecting it. From experiments made by us last fall, and recorded in the Genesee Farmer for last year, it is clear the worm feeds not only on the kernel in its soft and milky state, (though this is the time when the most serious injury is accomplished) but also in its hardened and ripened state. In none of our experiments have we seen a ripened kernel perforated by the worm; it was evidently gnawed off, and the worm usually commenced on the germinating end of the kernel.

We have seen in wheat in this district, but it was many years since, a worm which perforated the kernels, in the manner of the pea worm, and which lived apparently on the inside of the ripened grain. In this case it seemed to us the egg must have been deposited in the kernel, while in the soft or milky state. However that may be, the worm was clearly a different one from that described above, and which seems to threaten the grain grower at this time. Unless we have forgotten, there is a very good description of this perforating larvæ or maggot, in the November number of the Cultivator. It may also be found at page 367 of volume 8 of Genesee Farmer. This account agrees very well with our recollection of the worm alluded to; but it has not since 1824 shown itself to any extent in our wheat.

We hope this notice, imperfect as it necessarily is, may aid in determining whether the worm which has shown itself in the Genesee Country, is the same that proved so destructive in the Valley of the Hudson.

WATER—HARD OR SOFT.

Every person is aware that water derived from different sources possesses very different qualities; and that scarcely two wells or springs can be found, the water of which, in all respects, is perfectly alike. The great distinction is however into hard and soft; and this distinction is obviously the most important. Water which does not make '*suds*' with soap, or not without the use of large quantities; which causes the hands, when put into it, to have a hard, rough, and in some cases, astringent feel; which, when soap is added to it, turns a dull white, and soon shows a scum floating on the surface, may be properly termed *hard* water; and by far the greater part of that found on the northern slope of Western New York is of this class. On the contrary, if soap readily and perfectly unites with it; if to the skin it has the feel of rain or distilled water, smooth and soft, such water is usually called soft; and to this class much the greater part of the springs and streams of the southern slope of this district belong.

In all primitive regions as a general rule the water is soft, aud such too is the case in all countries in which lime or some of its salts do not abound. The acids, where they exist in the water, always make it hard, as is evident from the effect of what are termed the sour springs of Western New York, and the reason is perfectly obvious. The most common cause of the hardness of water is its containing some of the salts of lime or lime combined with some of the acids, as the muriate, sulphate, or carbonate; or, as is not unfrequently the case, all of these at once. Thus there is scarcely a stream, or even a well on the northern slope that does not hold in solution the sulphate and carbonate of lime, or gypsum and common limestone. These are evident from their effects on vessels, such as tea kettles, steam tubes, &c. in which water is boiled, covering the surface with a coating of combined plaster and lime, which frequently renders them useless for the purpose intended. The muriate of lime is less obvious, though a chemical analysis shows that it is usually present in these waters.

Some of our readers may not be aware of the reason why hard water puts on such appearances when soap is added, or why so much more soap is required than where the water is soft. In all the cases of the salts of lime, the acids are combined with the lime constituting the proper salt. If lime and sulphuric acid are united in the water, the result is sulphate of lime or gypsum; if the acid is the carbonic, then the salt is carbonate of lime; and so with the muriatic. Soap is composed of an oil, either animal or vegetable, combined with an alkali, the most common of which is that obtained from wood ashes, or potash. When this combined substance, or soap, is put into water containing any of these acids, the alkali of the soap is employed in neutralizing the acid of the water, setting the grease free in its original state, and thus rising to the surface, lifts also the particles of lime that have been freed by the action of the alkali on the acid, and together cause the scum so often seen on hard water when soap is applied. It is evident that until all the acid in the water is neutralized, the soap can produce none of its proper effect; hence the propriety of previously neutralizing the acid by the addition of wood ley or potash.

There is another point of view in which hard water must be considered disadvantageous. In making decoctions, as in the preparation of tea or coffee, to have the liquid of equal strength will require a much larger quantity with hard water than soft. Thompson, in some experiments made to ascertain the difference on this point, found that 36 grains of tea boiled in a given number of minutes in hard water, and the decoction evaporated in a slow heat, gave four grains of extractive matter. The same quantity treated in every respect in the same way, except the soft water was substituted for the hard, gave eight grains of extract, or precisely double; and in repeated experiments he arrived at nearly the same result. For the purposes of drink, hard water is generally preferred to that which is soft; and animals accustomed to the former, frequently manifest much repugnance to the taste of the latter. It is for domestic purposes, such as washing and cooking, that soft water is superior to hard, and here the difference is indeed great.

MR. VIELE'S ADDRESS.

This Address, delivered before the State Agricultural Society at its late meeting in Albany, is an able production, worthy of the man, and the occasion which called it forth. The opinions presented are in the main sound and judicious, the facts and illustrations used undisputed and appropriate, and the reasoning clear and lucid. It must have been listened to with interest, and will not fail to produce its effect in exciting the attention and prompting inquiry on the part of the legislature of the state respecting the paramount interests of agriculture.

The causes which have conspired to hinder the advance of agriculture on a correct and scientific basis, have been well delineated by Mr. Viele, and our exemption from these causes, and the results which should follow, correctly and happily stated. The following remarks on the present state of our agriculture, will be acknowledged by all acquainted with the facts to be just, although far from flattering to our pride of independence, and proving a great neglect in the development of our resources:

"That our agriculture is not in a more prosperous condition, is evident from the fact, that although we possess a salubrious climate, and a soil scarcely equalled in fertility, we have for a few years past been dependent upon foreign nations for the necessaries of life. Millions of dollars have been expended annually, for the last few years, for those articles of domestic consumption which our own agriculture should have supplied. Wheat, rye, Indian corn, oats, barley, butter, cheese, potatoes and hay, and a vast many other articles, have been imported to supply the demands of our consumers. There is no question in the minds of many who have investigated this subject, that our own agriculture is susceptible of such an improvement as would not only obviate the necessity of importations, but produce a vast surplus for exportation. By introducing an improved system of culture, greater economy in the use of manures, double, yea, quadruple that is now obtained, might be produced; the fertility and value of the soil enhanced; old, worn out lands might be renovated; and the taxable property and wealth of the nation increased in a corresponding ratio."

Mr. Viele justly urges the necessity of adopting, in addition to our old routine of husbandry, the cultivation of silk, sugar, flax and hemp, and in short all those things which are necessary to our comfort, or our independence, where the means are within our reach. Our average imports of silks is about 14 millions, and has risen in one year to 20 millions; of sugar the import varies from 12 to 15 millions; and the flax and hemp imported in manufactured fabrics is about 2 millions. That we *can* furnish ourselves with these things is clear, and that policy requires it of us is equally evident. The very canvass of our gallant navy is imported from Russia, while the rich Vallies of the West are capable of producing the best qualities of flax and hemp in any desirable quantity. In the language of Mr. V., "It is a fact humiliating to our national pride and patriotism, that our country in the sixty-third year of her *independence*, is as yet *dependent* upon the empire of Russia, Ireland, and the nations of the Baltic, for the canvass that floats our vessels, and upon Europe, the East Indies, or China, for the fabric from which to construct the American flag, that proud emblem of our national character and honor."

After describing the rapid advance of the production

and manufacture of cotton, from 1 million of pounds in 1793, to 500 millions in 1838; and from one small cotton manufacturing establishment of 70 spindles in 1790, to one million three hundred thousand in 1835, Mr. Viele thus alludes to the wool growing interests:

"The growth and manufacture of fine wool, is of still more recent origin, and was in its commencement, attended with great difficulties and discouragements. In 1802, the first pair of merinos were imported into this country from France, by the public spirited and patriotic late Chancellor Livingston. It was a long time before they were received with favor, and but few years have passed since they were ridiculed and denounced, as unworthy a breathing in our free air. Yet, notwithstanding the obstacles and prejudices in the way of their introduction, they received the favorable consideration and patronage of many of the states, and have multiplied and almost replenished the land. From the best data that we have, it is calculated that the number of sheep now in the state of New York, is about five millions; and in the United States, about twenty millions. About one-fifth of them, it is thought, are of the native, or coarse-wooled race; and the remaining four-fifths of high-grade, or full-bred Saxony and merino. Our woolen manufactures have increased in a corresponding ratio, by means of which many millions are annually saved the nation. Wool has now become the great staple of Eastern New York, and New England, and a source of great individual and national wealth."

The propriety of legislative aid to agriculture we have repeatedly endeavored to enforce; and believing as we do in the importance, propriety,—we might almost add necessity of the measure, we are glad to find Mr. Viele so ably supporting these positions; and we hope the arguments will not overlooked by the legislature, in whose hall this address was delivered.

"The wisdom of the policy of making judicious appropriations from the public treasury to improve our agriculture, and to encourage those productions to which our soil and climate are adapted, seems generally to be conceded, and the principle has again & again been acted upon with reference to other interest of minor importance; but the primary business of agriculture which belongs to all, and in which all are concerned, is made secondary in our legislation. Special legislation, private and local interests, almost always crowd themselves in advance of matters of general concern. Another reason, perhaps, why legislative action has not been had in this state, is the want of intelligence, comprehensive views, and concert of action, on the part of farmers themselves. So long as they will be blind to their own interests—so long as they will allow themselves to be mere drudges and slaves, 'the hewers of wood and the drawers of water' to the learned professions, and the other avocations of life—so long as they will consent to be the tools of power, and the mere automatons of designing politicians, just so long will their interests be disregarded, and their condition be comparatively degraded; just so long will they occupy a secondary position in the scale of respectability and honor.

"Many of the states of the Union, to say nothing of foreign countries, have set a noble and praiseworthy example in patronizing and encouraging the most useful of all arts. Almost all the New England states are offering bounties upon wheat, silk and sugar, produced within their borders. A number of the middle, southern and western states, are also turning their attention to these subjects. Foreign nations have for a long time seen the necessity of doing something to make more broad, and stable, and sure, this foundation of a nation's greatness and glory. The result of this policy is, that the old world, instead of being our market place, produces a surplus with which it supplies the deficiency of our miserably neglected soil. It is to be hoped that New York, proudly styled the Empire State, will follow, if not lead, in this noble enterprise. With an extent of territory greater than many of the kingdoms of the world; with a population amounting to about one-sixth of the Union; with a salubrious climate, and a natural soil, whose fertility is unrivalled, why will she lag behind her sister states and the world, in this march of improvment? The subject of internal improvement seems to engross, at this time, much of the public attention. But our authorities should recollect that however important and useful they may be, it is not *alone*, rail-road or canals, or mush-room cities and villages, that enrich a nation. Although that species of improvement is to a certain extent desirable, it should not be forgotten, that the internal improvements which contribute most to enrich a country, are those which improve and fertilize the soil, adorn the face of nature, increase the productions and enhance the value of the land. It is the successful cultivation of the soil *alone*, that furnishes the means for the support of villages, cities, rail-roads and canals. If that is left to languish and decline, the former will fall into premature decay, and the latter will truly become 'solitudes, and desert wastes of waters'."

We should be pleased to present further extracts from this well-timed address, to our readers, but the foregoing will be sufficient to show its general tendency and ability. The meetings of the State Society can hardly fail of a good effect, while the members produce such powerful appeals to the patriotism, good sense, and national and state feelings of their fellow-citizens in behalf of the vital, but hitherto too much neglected interests of agriculture.

AGRICULTURAL STATISTICS.

We have received from a friend a report made to the Secretary of Pennsylvania, in pursuance of a resolution of the legislature, from the county of Susquehannah, and give below a condensed view of the same. Such reports when prepared with accuracy are very valuable, and as we have before remarked we think the legislature of this state should adopt some method of securing a full statistical account of the agricultural, mechanical, and manufacturing interests of the state. We notice one material deficiency in this report; and that is an omission of the number of inhabitants; a defect we are unable to remedy from any late census. The report is for 1838.

No. of Farms,	2,768	Acres of Turneps,	73
Acres of Wheat,	5,439	" Buckwheat,	3,546
" Rye,	1,624	" Flax,	195
" Corn,	3,330	" Ruta baga	32
" Oats,	8,404	" Peas,	230
" Meadow,	34,792	" Beans,	83
" Potatoes,	2,367		

		Aggregate val.
No. of maple trees tapped,*	97,961	$23,502 64
Whole No. of Horses,	3,998	195,025 00
" Oxen,	2,919	99,425 00
" Cows,	8,187	164,305 00
" Sheep,	51,600	84,101 00
" Swine,	9,033	12,800 00
" Neat Cattle of all ages,	22,746	454,920 00
lbs. of Butter sold,	257,325	14,519 00
" Cheese sold,	58,559	3,659 94

* In the Report it was put No. of *acres* instead of *trees* tapped, which was clearly an error.

Remarks.—The average size of farms 105 acres. Of barley 178 acres were raised in the county. Corn averaged 33 bushels per acre. Potatoes 170 bushels per acre. The county has a surplus of oats, corn and potatoes. 193,783 lbs. of maple sugar were made, averaging 3 lbs. to a tree. The best crop of ruta baga on record in the United States, was raised in Chocrchut township, averaging on 3 acres more than 1200 bushels per acre. 342 tons of plaster were sown. Dr. Rose of Silver Lake, has a large number of merino sheep, and sold 18,000 lbs. of wool, at 44 cents per pound. Susquehannah county in Pennsylvania, adjoins the county of Broome in this state; and in its general characteristics of soil, productions, &c. much resembles that.

MARL.

This substance, which in some one of its many forms is so widely disseminated over our country, but which has been so long neglected by the farmer, under a more enlightened course of farming, is, we think, destined to act an important part in fertilizing soils now considered nearly barren in many parts of our country. It is an interesting fact, that marl is found where it is the most wanted; and that over the whole extent of land which stretches from New Jersey to Georgia, and from the sea to the highlands of the interior, it is but a few feet, to immense deposites of fertilizing matter, which only require raising to the surface, to give productive powers to large sections of country which have hitherto been considered worthless. The invaluable treatise of Mr. Ruffin, on the use of lime and its combinations, has been the means of turning attention to that subject, and examination has unexpectedly disclosed the fact of such deposites existing over almost the whole extent of the territory indicated. Dr. Cooper and Prof. Ellet of Columbia college, South Carolina, have lately given to the public an analysis of several kinds of marl in that state, and which from experiments, promises to be of the most essential service. New Jersey has, however, as yet derived the principal benefit from the use of marl; but in whatever part of the country it exists, it is a treasure of no mean value. Mr. Pierce, in a survey of the alluvial district of New Jersey, furnished for Silliman's Journal, thus describes the use and effects of marl:

"I visited many beds of marl, and found them of a pretty uniform character. The color is generally grey or greyish white, and good in proportion to its whiteness, which indicates the quantity of calcareous earth it contains. From 30 to 80 loads of marl are spread upon an acre. It is believed that a good dressing will last from 12 to 20 years. The lands of Monmouth county alone are said to be enhanced in value more than half a million of dollars by the discovery and use of marl.

"A respectable farmer of Middletown mentioned to me that a few years since he contemplated abandoning his large farm for land in other districts, as his own was unproductive. Learning the discovery of marl, he made himself acquainted with the mode of examining, and found good beds of this manure in almost every field, and liberally applied dressings to the soil. In walking over his ground, I observed rich whi e marl breaking out of banks and hillocks, and the streams paved with marine decaying shells. For more than a century, this land had been regarded by the proprietors as worn out and useless.

"This farm in its improved state, exhibited a gratifying sight. The hills, where formerly thorns, thistles, and mulleins, disputed the dominion, now supported luxuriant corn. Extensive verdant meadows were clothed with a rank second crop of grass; numerous stacks of grain, and well filled barns, evinced the productiveness of these fields, which are now estimated at three times their former value."

ROBBIN'S OATS.

Extract of a letter from D. W. Goodenow, Esq., Delavan:—"Enclosed are a few oats which are known in the Black River country as the Robbins oats, he, Robbins, having been their first grower. Some five or six years since, he observed in a field of the common oat, four heads that had grown out six or eight inches higher than the surrounding ones, and were ripe two weeks earlier. From those four heads has grown the seed. Very few of the common kind of oats are now sown in that country. The average yield of these oats has been about fifty bushels per acre, and in weight they have varied from 42 to 46 lbs. to the bushel, depending upon the old or new ground on which they were sown—the old yielding the heaviest oats. The enclosed are but a fair sample. I have just returned from that country with 30 bushels of them, which I intend to sow this spring."

The oats sent in the above letter, very much resemble the *Potatoe* oat.

MAKING SOAP.

It is well known to many housekeepers, that failure often results in the manufacture of common soap, even after the ley is proved to be of sufficient strengh, by means of the common family hydrometer, the egg. This failure is in consequence of the solution of the potash (or the ley) not being sufficiently *caustic*—which is caused by its combination with carbonic acid from the air while it existed in the form of ashes. This may be strikingly shown by its powerful effervescence when subjected to the action of one of the stronger acids. This difficulty may be easily removed by the use of lime, which has a stronger affinity than potash for carbonic acid, and which consequently abstracts it from the potash, leaving the latter nearly pure and consequently in a caustic state. It is accomplished either by placing unslacked lime in the bottom of the leach, or subsequently in the tub of ley. J.

Mr. Allen's Advertisement.

Several errors escaped correction in the advertisement of Mr. Allen in relation to his Berkshire and China pigs, which are corrected this week—to one of which we would call particular attention. The price of Berkshire pigs, as the advertisement read last week, was $20 per pair, at from "6 to 8 *months* old"—it should have been, from "6 to 8 WEEKS old."

He is a thriftless farmer who buys any thing which his farm can produce.

LEGISLATIVE REPORT.

In the Legislature of this State, on the the 4th inst., Mr. C. E. Clarke, from the committee to which were referred the various petitions praying for legislative aid in behalf of agriculture, made the following report:

That the committee have had that subject under their consideration, and have given it the attention which its importance seems to demand.

These petitioners are of four kinds. One class asks aid in behalf of the culture of the mulberry and the growth and manufacture of silk; another, for encouragement of the culture of the sugar beet and the manufacture of sugar; another, in behalf of the American Institute; the fourth, and by far the most numerous class, asks aid and encouragement in behalf of agriculture generally, and their views cannot be more fully and laconically expressed than in the words of the petitioners themselves.

"The memorialists respectfully represent, that agriculture, being the great business of the State, and the source alike of its prosperity, independence and moral health, is peculiarly entitled to the fostering care and patronage of the representatives of the people; that your memorialists consider our general practices in husbandry as defective, and far behind the improvements of the age, tending to exhaust the natural fertility of our soil; and calculated, when our new lands shall be reduced to the condition of most of our old ones, to render us dependant upon foreign countries for bread-stuffs and other necessaries of life—a condition humiliating and degrading to an agricultural people, and yet one that we are already partially realizing,—that while the products of our soil have failed to increase with the increase of our population, the agriculture of some other countries, and of some of our sister states, has been essentially improving, under the wise and salutary provisions of their public councils; and that the like provisions, on our part to stimulate and reward skill and industry, and to diffuse useful knowledge, in a business that so intimately concerns the welfare of all, is loudly called for, by considerations of the public good, as well as of justice to the great agricultural class of the community.

"A bill was reported at the last session of the Legislature to encourage agriculture, which the hurry of business prevented being definitively acted upon. That bill contemplated an appropriation of public moneys in aid of county agricultural societies, and for the establishment of a Board of Agriculture, to collect and disseminate all that might be found useful in the productions and in the management of our husbandry. It also contained provisions to encourage the culture of silk in our State, to arrest the depredations of the grain worm, and for a general diffusion of useful agricultural information.

"Your memorialists think favorably of the general features of that bill, and consider its provisions eminently calculated to improve our system of husbandry, and to multiply the sources of our wealth and prosperity, by enlightening, stimulating and rewarding useful labor.—Your memorialists, would therefore respectfully pray, that the general principles of the said bill, or one of like import, may receive your early attention, and that they may be matured into a law of the State."

Of these various petitions there are now in the hands of the committee rising of eighty, and the signatures amount to nearly six thousand. It is also understood that in the hands of the Senatorial committee on agriculture there are many more. There are few counties in the State from which petitions have not come, and there is not a single remonstrance.

When it is taken into consideration that this most useful and unpretending class of men are the last to complain, and the last to ask legislative aid, the committee are strongly impressed with the belief that such aid is needed, and that the prayer of the petitioners ought, in some form, to be granted.

About eight-tenths of the whole population of this State is agricultural; and when it is admitted that a thorough knowledge of agriculture in all its branches requires the possession of as great talents, as much and by far more varied learning than most of the learned professions and mechanic arts, it seems amazing that there should be no school, no seminary, no subdivision of any school, in which the science of agriculture is taught.

We have schools, professors and teachers of divinity, physic and law—for painting, music and dancing—all sciences, from the most holy to the most profane—from the most sublime to the most ridiculous—in the arts of war and the arts of peace—but in the science of agriculture, a business which occupies eight-tenths of all our population, and which is the basis of all our arts and the foundation of our whole system of civilization, we have no professor, no teacher, no school. We have tradition, and tradition alone.

Hence it is, that while all other sciences have advanced towards perfection, and some with a rapidity bordering on the miraculous, the science of agriculture has remained stationary, and the scholar who will take the pains to review the studies of his youth, will find in the Georgics of Virgil that the science of agriculture was as far advanced when the Roman bard sang as now.

It was then, as now, believed that the necessary tendency of seeds, and plants, and animals, was to degenerate, and that the soil as it was wrought must of necessity grow poor and barren, and they looked back with melancholy pleasure to the golden and pastoral ages which were past, and mourned that the age of iron was upon them. To inspire a more cheering belief, to produce an entirely different and more flattering result, should be the object of those who make laws.

It is thought that legislative enactments stimulating industry, directing it correctly, and suggesting new objects for its action, would produce this beneficial result.

It cannot have escaped observation that our soil is not as fertile and productive as it once was, that the quantity of most of our staples has diminished and their quality deteriorated, and of course that the farmer, who, year after year, finds the productions of his farm diminishing, although his number of acres may remain the same, is actually wasting his patrimony, and contrary to all rules of economy is living, not on his income, but on his capital.

It is therefore supposed that agricultural pursuits cannot be as profitable as other employments, and hence the great strife seems to be, not to render the business itself honorable and profitable, but to escape from it to some more fashionable pursuit, or to abandon farms which are supposed to be worn out, and go in pursuit of new lands, and not profiting by the experience of the past, go through with the same system of deterioration again.

Hence the overweening desire to become professional men, to become merchants, speculators. Hence the continued rush of our inhabitants to the west, to the west as though, not merely the fortunate isles, but the fortunate portion of the continent too, lay at the west.

This western fever should, if possible, be cured; this mania for emigration should be checked as exhausting to the State abandoned, and too often disastrous to the emigrants themselves. The State loses its native population and its wealth; the emigrant his home, his friends, his school-house, the library, the church and the innumerable things which improve human nature and sweeten life.

It is true that in some parts of this State our fruit has become diseased, and the trees themselves go to premature decay; that the peach and the melon once so abundant are becoming strangers, and our great staple—wheat—is an uncertain crop, and its culture abandoned where it once abounded. Even the bee, that admired insect, which administers so much to our comfort, while it sets so bright an example of industry, neatness, art and good government, has become a prey to some curse of this iron age. New and unheard of diseases have afflicted our cattle, and the labor of years has been swept away by some nameless and fatal disease. Discouraging as the facts at first appear, the difficulties are not insuperable, they furnish a strong incentive to that ingenuity and talent for useful invention which our countrymen possess in so eminent a degree. To mitigate certainly, and perhaps to subdue, most of these evils, is within the scope of man's power. Does any one despair of renovating and fertilizing a worn-out soil, we could point him not merely to farms but to whole counties in this State, where, under an improved system of husbandry, the products have been more than doubled; we would direct his attention to Belgium, once the most barren, now the most productive soil in Europe. Does any one despair of arresting the progress of disease amongst his cattle, he should remember that a scourge, more deadly than the plague, has been disarmed of its power. And the committee believe that science has in store a remedy for the insects which destroy our crops as certain, and probably as simple, as that which ejects the moth from our wardrobes

It is not for the countrymen of Franklin and Fulton to despair; it is peculiarly for them to meet, encounter and subdue, as well the smaller, as the greater ills of life.

The farmer of the State of New-York would think he was abused if he were told that his house was neither handsome nor cheap; that from the defects in its structure, it was too often the abode of vermin, and the workshop where disease was generated.

He would be still more scandalized if he were told that the health of his wife was often impaired, and perhaps her life shortened, by the inconvenience of his dwelling.

He would hardly give credence if he were told, that by a judicious choice of situation, and proper structure of his barns and yards, and sheds, at least one quarter of the forage fed to his cattle during the winter, might be saved, and the condition of his stock improved, and the tending of his cattle at all seasons and in all weathers, be rendered a neat and pleasant task.

He would be still more incredulous if he were told that the profits of all his stock might be increased at least a quarter, by a judicious selection of improved breeds.

If he were informed that an old worn-out field could be easily and profitably fertilized, and that by a judicious rotation of crops it might be continually tilled, and not exhausted or impoverished, he would probably express his total disbelief of the fact.

If you called him a pirate, and told him that he robbed and killed without mercy or motive, that the object of his piracy was his servant, a most ingenious and industrious mechanic, who toiled without pay, and clothed and boarded himself, he would probably call you a slanderer, and threaten to hand you over to the buffetings of his lawyer; his wrath might, however, subside, when you explained to him that the faithful servant, whom he robbed and killed, was the bee, and that by a slight tax, or "*judicious* tariff" on his industry, he would get more honey and perpetrate no crime.

Should you inform him that on his own good farm existed the elements of the silk, the sugar, and perhaps the grape; that there was scarce a waste spot on it but that something useful might be induced to grow; that it was his duty to propagate the walnut, the chesnut, the locust and the cedar; that the former would supply him with nuts, and the latter with imperishable timber, and while growing give shade to his cattle and ornament to his farm, he might call you a visionary projector, or plead his reluctance to do anything for posterity—posterity having done nothing for him.

Should you inform him that the growth and manufacture of silk presented a new branch of industry, peculiarly adapted to females and children, by which his daughters would enjoy better health, become far more useful in society—a profit rather than a burthen to their parents—he might express his incredulity, but at the same time his hopes that such was the fact. For he might recollect the time when his mother carded, spun and wove, in the good old fashioned days of honest industry—when dandies and dyspepsia, and the western fever were unknown, and when to do something useful, had not yet become either unfashionable or degrading.

The committee are of opinion that this criticism is in the main just, and that by the judicious application of science to agriculture, that all, nay, more than is professed, may be performed.

The committee are deeply impressed with the belief, that by legislative aid, such an improved system of agriculture may be introduced as will render the business both honorable and profitable, and that for many years, the State of New-York might retain her whole native population.

That the population, becoming more dense, the farms smaller and better cultivated, and of course more productive, the roads improved, the school-house and the church, and the library, more convenient, the manners and morals of the whole people would be improved, and their character elevated, and this State at *no very* distant period become an empire in fact, as it is in name, the happy and honored abode of ten millions of freemen.

The committee look forward to the time when the farm-house shall be the neat and cheerful abode of contentment, industry, wealth and refinement, and the business of agriculture become as honored as it is useful; to check that exhausting mode of cultivation which impoverishes as it advances; to stop the great tide of emigration which, with a current so strong and deep, sets to the west; to mitigate the evils and enhance the pleasures, the profits and the honors of agricultural life; to refine and elevate the character of eight-tenths of the population in this great State, is a work of which any age might justly be proud. And that Legislature, which shall be instrumental in effecting it, may repose securely on the enduring gratitude of a whole people.

Confident of effecting much, and hoping to accomplish all these anticipations, the committee have prepared a bill, which they ask leave to introduce.

From the Vermont Chronicle.

The Seven Cows Outdone.

MR. EDITOR:—Having noticed an article in your paper in relation to the profits from seven cows, owned by Mr. F. E. Fuller, of Hardwick, Vt., I take the liberty to send you a statement respecting two cows in the same town, as follows,—commencing June 1, 1838, and ending Jan. 20, 1839:—

478 lbs. butter, at 20 cts.,	$95,60
Raised one calf,	5,00
580 lbs. pork, ¼ from the cows,	23,20
Total,	$123,80

Calling the amount from the seven cows $400, which is stated to be something short, it will readily be seen that the two cows have outdone the seven by $4,76 each,—notwithstanding the difference of two months in the outset. No extra pains were taken with the cows, no extra feeding until the 15th of November, and then one peck of potatoes each per day. Amount of butter made the three first months, as follows: June, 78 lbs.; July, 96 lbs. 12 oz.; August, 85 lbs. 7 oz. Greatest amount made in any ten days, 46 lbs. 11 oz. D TUTTLE.

COMMUNICATIONS.

STORM OF JANUARY 26, 1839.

Mr. Tucker—I have collected a few notices of the late remarkable storm, which has been felt so extensively over almost the whole of the middle and northern states. Such records, though not as perfect as we may desire, will in the lapse of years, furnish data upon which correct theories of the origin and movements of these gales that are at times so destructive on the Atlantic coast, or on the great Lakes, and are felt over so wide an extent of country. Observations appear to render it probable, that the theory of Mr. Redfield of New York, of the origin and direction of our storms that almost annually sweep over the Atlantic sea board or the interior of the continent, will be found to be the true one; that they are rotary in their movements; and when the laws that govern them shall be better understood, important results, particularly to the shipping and commercial interests, will ensue.

In making selections from the various accounts of the storm that have fallen under my notice, I have chosen principally those near the 42d degree of latitude, as best illustrating the time and course of the gale. It is to be regretted that the editors of our principal journals, are not more particular in describing the principal facts relating to such storms, such as their commencement, duration, changes and force of the winds, the state of the barometer and thermometer, and other things that would be of interest to all, and particularly so to the meteorologist.

At Boston the wind was from the S. S. E. and blew a gale for about six hours, mostly ceasing at 4½ o'clock, P. M. January 26: no notice of the state of the barometer.

Northampton. Wind violent from the south. Rain all day Saturday; and rapid rise of the river. At Bellows Falls, higher up the valley of the Connecticut, a paper gave this statement:

"Last Saturday (26) we witnessed a most unprecedented freshet. The strong south wind commenced on Friday night, and blew a hurricane on Saturday. The Connecticut river rose 30 feet in a few hours."

Albany. Wind violent from the S., but the beginning or termination of the gale not stated.

Cherry Valley. Slight fall of snow, evening of the 25th. Wind south. Midnight, rain, wind E. of S. Rain till 4 o'clock 26th, wind from S. E. to S., not violent. At 4 wind shifted to N. W. with snow. 30 miles S. W. of Cherry Valley, rain on the morning of the 26th, wind S. Snow at 9 o'clock, and a heavy fall during the day.

Mr. Backus of the Utica Academy, has kindly furnished me with the following statement of the weather at that city.

January 25th, Ther. morning 10°, noon 22°, evening 34°, wind S. E. all day. Cloudy. Snow at evening. Jan. 26th, Ther. morning 38°, noon 34°, evening 31°. Wind, morning S. E. About noon changed to W. and continued in that direction during the day. Did not note whether the change to the west was gradual.

Weather. Rain about midnight of the 25th. Continued incessantly until 4 o'clock P. M., 26th. Hail succeeded for 15 minutes; then snow during the rest of the day and night. The wind was *high* during the storm.

Quantity of rain and snow that fell. Guage elevated 20 feet above the Erie canal.

At 8 A. M. (Jan. 26),	0.55
At noon, "	0.00
At 4½ P. M. "	1.10
At 7 A. M. (Jan. 27),	0.17
Inches,	2.42

Otisco, Onondaga county. January 25th, Ther. at 9 o'clock A. M. 20°, at 2 o'clock 31°, wind W. of S. to S. Cloudy. January 25th, Ther. at 9, A. M. 31°, at 2, P. M. 30°, at 5, P. M. 29°. Wind; morning S. of E., at 9 o'clock, N. E., at 12 o'clock, N., at 2 P. M., N. W., and at 4 o'clock P. M., W.

Weather: Rain 2 o'clock A. M. 7 o'clock, A. M. snow, wind E. Snow remainder of the day. Little wind till 3 o'clock, P. M. Depth of snow at 6 o'clock P. M., 2 feet 6 inches by measurement. January 27th, snow. Much drifted. Roads impassable. Ther. 9° through the day. Wind W., strong.

Remarks. I have rarely known a change of the wind effected from the south, (as it was on the evening of the 25th) around to the E. N. N. W. and W., where it was on the evening of the 26th, so gradually, as in the storm of the 26th. The movement was constant, from hour to hour, yet there was no gale. The snow fell fast, and almost perpendicular, and there was no blustering till about 3 o'clock P. M.

I owe to the kindness of Prof. Dewey of Rochester, the following notes of the weather, winds, &c. in that city.

January 25th. Splendid crimson clouds before sunrise; wind S. W. all day; cloudy at evening.

January 26th. Snowed one inch deep last night. Snow ceased in morning for a time. Wind S. W.—Rained awhile in the forenoon, then changed to snow, and snowed all day. Wind N. W. towards evening and N. of W. through the night following strong. Snow much heaped up.

January 27th. Snow. Wind N. W., snow much drifted. In the whole, snow fell 18 or 20 inches deep in the woods by measure. One-third at least is to be deducted from the ordinary estimates made by people of rain or snow; actual measure alone is to be relied upon.

THERMOMETER.

	7 o'clock, A. M.	2 P. M.	9 P. M.
January 25th—	28°	41°	30°
" 26 —	32	32	26
" 27 —	12	10	8
" 28 —	6	14	14

BAROMETER.

	Morning.	Evening.
" 25th—	29.60	29.46
" 26 —	29.23	28.92
" 27 —	28.96	29.31
" 28 —	29.42	29.50

The barometer it will be seen in this case, as it usually does, gave decisive indications of the coming storm, and of its passing away. The only other note I have seen of the state of the barometer is the following from New Haven:

"Storm violent in the morning of the 26th, and at noon a hurricane. Wind was then E. S. E. barometer 29.30. At 4 the wind veered a little to the S., the storm continuing with unabated violence. At 5 o'clock P. M, wind S. E., barometer 29.08. Rain and wind ceased at half past 6. Bar. lowest at 9 o'clock P. M., 29.01."

At Canandaigua, Middlebury, Aurora, Jamestown, Maysville, and on the high land of the dividing ridge, generally, much more snow fell than on the margin of the lakes; it raining at Oswego, Rochester, Niagara, &c. longer in the morning, than it did 40 miles south of these points.

The quantity of rain that fell on the sea board was greater than that of snow and rain in the interior, it varying in the first case from 3½ to 4 inches, and in the last from 2½ to 3 inches; which latter estimate may be considered about the average in Western New York.

There is one point connected with meteorology which does not seem to have received the attention it deserves; and that is the almost uniform direction of the winds in the most elevated parts of our atmosphere to which clouds ascend. This particularly observable in the case of the cirri, or those white streaming clouds that always are the highest of those belonging to our system of clouds, and indeed the highest vapors that are visible, unless the aurora should be proved hereafter to belong to this class. Repeated observations have convinced me that whatever may be the direction of the lower currents of air, and consequently of the clouds, the instances are very rare, not one time in ten, in which the air in which the cirri floats, does not come from some point between S. W. and N. W., the general direction being west. Thus during the present month (Feb.) from the 20th to the 25th, the lower clouds moved from the S. to S. E. and E. invariably to some point between N. and W., yet when these broke away, as they several times did, the higher clouds were always moving from the west, or not more than one or two degrees from that point. This course of the higher current must have a decided effect on our changes of seasons, electrical state of the atmosphere, on the formation and violence of our storms, and in general in controlling and modifying the meteorological character of our country.

Otisco, Feb. 1839. W. G.

Raising the Morus Multicaulis from Cuttings.

Mr. Tucker—As frequent inquiries are made as to the best mode of raising the Morus multicaulis, I communicate for your columns the method I have pursued for several years with success, which may be acceptable to such of your readers as are intending to cultivate this tree, the ensuing season.

A difference of opinion prevails as to which is the best of the two methods, to plant the cuttings, or *to lay the trees down whole in a furrow, and cover them.* I have practiced both methods, but prefer raising them from cuttings, particularly if the wood is well ripened, as I think a greater number, and larger and better trees may be raised in this way than the other. When the trees are laid down whole, it is not usual that all the buds grow; a few will take the lead and grow vigorous, and others will send forth small and feeble shoots; and all *growing so close together*, have not that chance to make large and well branched trees that cuttings have, placed at proper distance in the row. The shoots from them have but few side branches; whereas, those from cuttings are well supplied. Nevertheless, this is much the easiest way and may be the preferable mode when this tree shall have become so increased as to render it less an object to produce the greatest possible number of plants in a season into which it is capable of being multiplied. It is the method practiced and recommended by Messrs. Cheney; while the other (by cuttings) is adopted by Messrs. Gideon B. Smith and Sinclair of Baltimore, and Messrs. Prince of Long Island. The method I have adopted of raising this tree from cuttings is as follows (for the which, by the bye, I claim no originality, having derived it from others.) I sever the stalk from the root, leaving on the root two or three good buds; having taken off the side branches not so close as to injure the buds of the main stalk, I then begin at the lower end, half or three-fourths of an inch above the bud, and cut it off a little sloping at a single blow of the knife, if the stalk is not too large, proceeding up as far as the wood is sound and good, giving but a *single bud* to each cutting, except where the buds are so near as to render this impracticable, and in very small shoots, in which I leave two buds. A cutting an *inch long* of sound wood will grow, but I would prefer them some longer. The large side shoots I cut up in the same way; but the small ones and the extremities of the large and also of the main stalks I leave whole, to lay down and cover over, as these extremities if made into short cuttings do not grow so readily, the wood being soft and spongy. The ends of these and of the cuttings should then be scalded with melted pitch, or rosin with a small portion of tallow or bees-wax in it; a little of it being melted at a time in a shallow tin or other vessel, and kept warm though not so hot as to injure the cutting, and the ends of the cuttings slightly dipped in it. This I deem of importance, as the cuttings prepared in this way will be much less likely to decay. The pitch will prevent the too great absorption of moisture *which induces decay*, and keep the cutting in a sound and healthy state until it has taken root. It is not necessary that the pores of the ends should be open, in order to supply the cutting with the moisture necessary to its growth; enough will be absorbed through the lateral pores. As it is the lower end which absorbs the most by the action of the sap vessels, it is here I find the decay commences, proceeding upwards; this end, therefore, in particular should be sealed, if both are not. The cuttings thus prepared are ready to be planted. My cuttings I start in hot-beds, prepared in the usual manner, as for raising early cucumbers, &c., in the latter part of March or beginning of April. In the same bed

may be raised hills of cucumbers, tomatoes, &c., and the cuttings will be ready to be transplanted by the time the vines begin to spread. There is this advantage in planting them in the hot-beds, over the planting them in open ground: A greater number of them will grow; their growth is forced; it is easier watering and taking care of a large number, as they occupy but *little space* —to water and take care of the same number set out in open ground at such distances apart as they should be set to grow, is a great labor; besides, when planted, after drenching rains, the ground is subject to bake, especially if it be a clayey texture, and become hard, and the cuttings liable to perish. I one season lost a great many in this way, while those in my hot-bed did well; besides, another important advantage is gained, the trees get one or two months start of those grown in the open ground, obtain a larger size, and a greater maturity of wood; which in our northern climate, is a *principal desideratum.* Having made my hot-beds, and put on the frames, which are to be covered with glass, or, which is a tolerable substitute, oiled paper, sods are provided and cut into pieces about two inches square. In the centre of these, a little sloping, is made a hole with a sharp stick, and the cutting inserted so that the bud will be on the upper side of the slope and just within the sod, the grass side of the sod being down. These are placed in close order in the hot-bed, the surface being first made level, the end of the cutting sloping to the north, the bud on the south side; then, over the whole is spread a covering of light fine mould or good garden soil, about half or three-fourths of an inch deep, gently dressed down with the hand. The bed is watered and the glasses put on. In a week the shoots will begin to appear. They must be kept clean by weeding, and watered every few days at evening, and by raising or shoving the sash a little through the day if it is not cold, and the beds shaded from the middle of the forenoon to the middle of the afternoon, in hot sunny days, with a mat or other covering, and covered at night if cold or frosty. These plants will be fit to transplant in May, as soon as the ground is warm, and there is no more danger of frost, when they should be transplanted in good garden soil, in rows two feet or two and a half feet apart, and eight or ten inches apart in the row, carefully taking them up with the bits of sod in which their roots have extended, and giving them a watering after they are set out. If properly transplanted, not one of them will fail. The extremities of the shoots and small branches, may be laid down lengthwise in rows two inches apart in the hot-bed, well covered with about an inch of earth; taken up when grown, cut apart, if two or more shoots proceed from one, and transplanted in like manner,—or they may be planted in the open ground, laying them down and covering them. Those who do not wish to make a hot-bed, may plant their cuttings in the open ground, in light rich soil; if sandy, all the better, in rows two feet apart, and six or eight inches in the row. To keep the ground moist and prevent its baking by the action of the sun, a covering of leaves, grass or litter of some kind, should be laid along the side of the row, close to the cuttings. These will frequently need watering in dry weather. The ground must be kept clean of weeds, and occasionally stirred till the beginning of August, after which the plants should be left to mature and harden their wood. W. W. B.

Hammondsport, March 8, 1839.

"TURNEPS FOR HORSES---CAUTION."

Mr. Tucker—Under the above caption, I have observed in some of the newspapers an article from the 'Malone Palladium," written by Mr. Sabin, from which I make the following extract:—

"Having within a few days past been witness to the fatal effects of turneps upon horses, I feel it my duty to lay before the public the following:—It is now six or eight days since I threw into the yard 25 or 30 bushels of turneps that were partly rotten, caused by heating, on account of not being sufficiently aired or ventilated. Young cattle and sheep eating them freely received no damage from them. But a very different result has attended the horses, which were four in number, and running in the yard with the cattle, and eating them as freely, have all died in the short space of five days. Three of these horses were young, and in high order, and could not by the common course of nature, have died as suddenly upon hay only."

And the writer is disposed to infer, that turneps are poisonous to the horse, while safe and good food for cattle and sheep.

That turneps are injurious to the horse, is not only contrary to my own experience, but to the experience and recommendation of farmers who have used the turnep the longest, as in England for example, where the turnep is very commonly used as the partial or entire food of the horse. For three years past, I have used the turnep (ruta baga) more or less extensively in feeding my horses, and with the best result, their health and condition, if not high, being uniformily good. In no case during these three years have I ever perceived the least injurious effects from feeding this root to any animal whatever. Some of my neighbors have fed their horses very liberally or almost exclusively on the turnep, and I have heard no complaint from any one with regard to them. Indeed the general complaint has been, not from the use of the turnep, but from the want of them. What effect freely eating spoiled turneps would have on the horse I know not, having never tried it; but should believe that with this root as with others, pernicious qualities might be acquired by partial decomposition. As to the sound root, fed in any reasonable quantities, I should have no apprehension whatever as to the effect on horses, any more than on cattle or sheep. I have for a number of years grown this root extensively; have fed it to all my domestic animals, have used it for fattening cattle, feeding sheep, horses, young cattle, &c., and consider it one of the most valuable plants that can be cultivated by the farmer.

Onondaga co. Feb. 19, 1839. H. M. Gaylord.

GRINDING COBS.

Mr. Tucker—It has always been the practice in this part of the country, when the corn has been threshed from the cobs to throw the cobs away; but we have learned this winter to do differently with our cobs. We now get them ground. We find that meal made of cobs, pig corn in the ear, and oats, is most excellent for horses, cattle, sheep and hogs. Sometimes we get cobs and oats ground together, always using half or one-third cobs. We have fed this meal, mixed with potatoes cut fine, to our calves and sheep. For our hogs we boil potatoes and mix in this meal while the potatoes are yet warm. This cooks the meal in some degree. This is a new way of wintering hogs, at least to us; but I have never known our hogs to do better.

Farmers who never got any cobs ground, I think would do well to try the experiment, when I think that they would agree with me that cobs are of too much value to be thrown away. Cassander.

Hume, March 5, 1839.

From the Maine Farmer.

Breed of Swine.

Messrs. Editors:—I have been for many years engaged in raising hogs and making pork, and am fully convinced, that much of the profit of that business depends on the breed. "The old fashioned, thin, long legged, long nosed, gaunt bodied" kind, are hardly worth keeping. They are continually uneasy and squealing, feed them as much as you will. This kind, however, is fast disappearing and their place being supplied by those that are better; among which the Bedford will take the first rank. This breed was introduced into Massachusetts, several years ago, and Oliver Fiske, of Worcester, who has much experience in the business of raising pork, says "experience has proved to my satisfaction that the Bedford breed is far the best that has been introduced into our country. They are quiet in their nature, fat easy and with little expense or trouble. I have had them at 12 months old, weigh 340 lbs. and a considerable number at 18 months old, 400 lbs."

Levi Lincoln, late Governor of Massachusetts and President of Worcester Co. Ag. Society, has given his opinion of this breed of hogs, in the following language:

"I have great pleasure in voluntarily offering myself as your compurgator in the representations with which you have recently favored the public, of the Bedford breed of swine. The care and perseverence which have marked your attention to the prospects and value of these animals, and the success which has followed your exertions to introduce them to the favor of *practical* farmers, require, at least, an acknowledgement of obligation from all those who have been particularly benefited by your liberality, and from no one more than from myself. This breed of swine has taken the place of a long legged, long nosed, flat sided, thriftless race, called by some, the *Irish* breed, by others, the Russian, which would barely pay, by their weight, for ordinary keeping, and never for one half the expense of fattening, if, indeed, grain would make them fat."

"I had three pigs butchered from the same litter, precisely 7½ months old. Their weights, when dressed, were 230, 235, and 238½ lbs. One sold in Boston for 6¼ cts. per lb.; the others were put up here for the family use. The expense of keeping and fattening these pigs, I am satisfied, was less than with any other breed I ever raised, and the proportion of bone and offal to the valuable parts, was surprisingly small. I have fifteen more on my farm, part designed for the market in the spring, and part to be kept over as store swine, and their appearance will furnish ocular satisfaction of the propriety of all which has been said in favor of the breed."

A pair of these pigs was first sent to this county by the Duke of Bedford as a present to Gen. Washington, by a farmer by the name of Parkinson, who resided near Baltimore. Instead of delivering them to the Gen., he sold them. The first that came into Massachusetts were sent by Gen. Ridgely of Pennsylvania, to Col. Pickering of Salem, who has taken great pains to preserve the breed pure and introduce them among the farmers of that State. Mr. John Reed of Roxbury, obtained them from Col. Pickering, and Mr. Fiske of Worcester, had them from Mr. Reed. In 1835, Mr. Sanford Howard, who then lived in Hallowell, purchased a sow and I purchased a boar from Mr. Rowland Howard of Easton, Mass., who had them from Oliver Fiske. All the hands through which they passed, from their first introduction into this country, until they were brought to this town, are careful breeders of pure stock, and much pains has been taken to preserve this breed pure, and avoid breeding in and in. That is, progenating offspring among the same litter. No reasonable doubt can therefore exist, but that the breed was introduced into this State in its purity.

Since I have had them, I have found them to fully sustain the reputation given to them by the breeders in Massachusetts. They are very small boned, in proportion to the size. Quiet, easily fatted, do much better on raw food than any other kind, and obtain a good size at an early age.

I have crossed the pure Bedford with the ¼ Bedford and ¼ Mackay, making the progeny ¾ Bedford and ¼ Mackay, but found very little advantage from the crossing. One of these pigs I wintered last winter on 8 lbs. of raw Mangel Wurtzels per day, and she kept in good condition, and brought a litter of 10 pigs in April, a few weeks previous to which, I fed her on the slops from the house. Nine of the pigs lived, and made fine hogs. During the summer she lived principally on grass with a few raw potatoes, and in October she had another litter of 13 pigs, four of which, however, owing to an accident, died. She was then kept on boiled pumpkins, oats and peas, and barley-meal. Since then, she has lived entirely on raw Ruta Bagas and Mangel Wurtzels, at the rate of about 12 lbs. per day, with an opportunity to burrow on the manure heap, and is now in good condition.

I killed one of the pigs which was ¾ Bedford and ¼ Mackay, when nine months old, that weighed 302 lbs. He was fed on the slops from the house, during the summer, and the last two months was fed on meal and corn. When I first commenced feeding him on meal he ate about two quarts per day, but after 5 or 6 weeks he would not eat more than one quart. He gave the most meat in proportion to the bones, of any hog I ever killed, and I think was the cheapest raised. Others who keep this breed, have made the same statement. There was one of the pure Bedford breed killed in the neighborhood 14 months old, that weighed 385, and another 18 months old, that weighed 420 lbs., neither of which had any extra keeping.

Between the 20th of March and last of May, I shall have 4 litters of pigs, two of which will be the pure Bedford, and two will be ¾ Bedford, and ¼ Mackay, with which I can supply any persons who may be in want.

Any persons who are desirous of examining the breed of hogs, can do so by calling at my farm, about 2½ miles from Hallowell Village.

J. Wingate Haines.

Hallowell, Feb. 13th, 1839.

Liquid Manure.

This species of manure is so valuabe, and so universally neglected, that a few observations, independent of what has been previously said, may tend to call the attention of agriculturists to an article of immense importance, which at present seems either entirely to have escaped their observation, or to have been deemed beneath their notice.

It should be always kept in view, that beyond the increase of size and weight which takes place in a living animal, the quantity of food supplied will pass from the animal in some form or other, either in secretions, such as milk, urine, &c., or in excretions from the bowels.—Beyond, therefore, what is expended in adding to the weight of the animal fed, the manure, either in a solid or liquid form, should be equal to the quantity of food supplied. The solid manure, or dung, is the refuse of the food taken in by the animal after it has undergone the digestive process in the stomach, its nutritive particles being extracted, and taken into the animal system to supply the waste constantly going on, as well as to add to the weight or size of the animal. The urine again is the refuse of matter which has been absolute particles of the animal, and may, therefore, be strictly considered animal matter; it contains within itself a far greater proportion of the fertilizing qualities that constitutes the essential principles of manure, than what is contained in the same quantity of excrementitious matter, or dung; but the fertilizing properties of urine are very trifling in the green, or fresh state to what they are in the same liquid when it has undergone a thorough fermentation, and been thereby reduced to a high state of putridity. Whilst undergoing this process, it may be made available as a menstruum to convert vegetable, or animal matter into the richest manure. The quantity of urine made by a moderate size horned beast, when full grown, in the course of twenty-four hours, will be found something about thirty-two pounds, as has been before observed; but generally speaking, the quantity, if the beast be well fed with good food, will be much greater; even, however, according to that estimate, the quantity as well as the quality is one of the greatest importance, and has a claim to the best attention of every one concerned in agriculture, or in the keeping of any kind of live stock.

The estimate generally made, is, that one third only of the food taken in by a neat animal, is parted with as excrementitious matter, or solid dung; two thirds, therefore, according to that estimate, must pass through the animal in a fluid form. Whatever food is taken in, before it can be made available for animal sustentation, must be converted into a fluid; for in a fluid state only, can anything be made available to renovate those parts of the animal system, which, in the performance of their functions, are undergoing constant waste, as well to supply those demands which the various secretions, constantly going on, are, without interruption, making upon the system. The following experiments, detailed in the 1st vol. of *British Husbandry*, p. 355, are pertinent to the subject.

"On the 28th March, 1833, an experiment was made with a large size Yorkshire cow, which was fed during four and twenty hours, with the following provender:

"81 lbs. Brewer's Grains,
30 lbs. Raw Potatoes,
15 lbs. Meadow Hay.

"The food thus amounted to one hundred and twenty-six pounds. She drank two pails full of water, and the urine was allowed to run off; but she had no straw, or litter of any kind, and the weight of the solid dung, which was carefully swept up, amounted to forty-five pounds.

"Another experiment was made with the same cow a week afterwards, but with a change of food, which was continued during some days, on the last of which she consumed, within the twenty-four hours, the following quantity:

"170 lbs. Raw Potatoes,
28 lbs. of Hay.

"As in the former experiment no litter was allowed, and the urine was let off, but the solid dung amounted to seventy-three pounds.

"Although not incidental to the subject in question, it may, however, be worthy of remark, that although the cow was in perfect health, yet on this latter food, her milk actually fell off at the rate of very near two quarts a day.

These experiments, though to a certain extent valuable, as showing the quantity of extrementitious matter in relation to the food consumed, are yet far from being satisfactory, as the exact quantity of water drank, is not set forth with precision in one case, and not at all in the other. The individual in making the experiments did not seem to consider that the drink, to a certain extent, was as necessary to sustentation as the other food, and ought decidedly, before such experiments would have been satisfactory, to have been seen forthwith precision. However, as they are, the quantity of solid dung in proportion to the food consumed, is pretty clearly shown, when the fluid taken by the animal has been brought into account, to be under-estimated when you put down as one to two.—*Robert's Hints on Agricultural Economy.*

On the Culture of Rape.

Our attention has been drawn to this plant by the letter of Mr. Kennedy, inserted under Correspondence; and from the experiment in its culture which he details, there is a strong probability that it may be profitably introduced among us as a farm crop.

Rape belongs to the *Brassica*, or Cabbage, genus of plants, and is cultivated extensively on the continent, and in some parts of Britain, principally for the oil afforded by its seeds. According to De Candolle and Von Thaer, the species cultivated in Germany, France and the Netherlands, is the *Brassica campestris oleifera*, while that cultivated in Britain, is the *Brassica napus*. The former has hispid, or bristly leaves, is more hardy, and more productive than the latter, the product being 955 to 700 of the latter. The rape is a biennial plant, and perfectly hardy, we *now* believe, in our climate.

With a view to encourage experiments in the culture of this plant, we shall state somewhat in detail, the mode of managing the crop, its product, uses, &c.

The soil for rape should in the first place be dry—it should be rich, ploughed deep and well pulverized. Reclaimed swamps suit it well. Prepare as for turneps, or other fine seed. The seed may be sown at the same time as the common turnep, and indeed it is sometimes sown with the turnep, though the practice is a bad one—the turneps being gathered in the autumn, and the rape in July following, when the seed has attained to maturity. It may be sown broad cast or in drills. If intended to be fed off by sheep in winter, a practice recommended by Loudon, and followed in Lincolnshire, one peck of seed may be evenly sown, broad cast, upon an acre; but if the object is seed, or the drill culture is to be adopted, two to four quarts of seed will suffice for an acre. Resembling the turnep much in the properties of its top, it affords, in autumn and winter, a fine "bite" for sheep. It is scarcely surpassed, says Loudon, by any other vegetable, in so far as respects its nutritious properties, and that of being agreeable to the taste of the animals. The after culture of rape should be like that of the turnep, though we are afraid it would be apt to be neglected with us—that is, it ought to be kept free from weeds by the hoe, and the plants ought to be thinned to the distance of six inches. In close crops the seed is only found on the summits of the plants; in wide ones it also covers their sides. As seed is the principal object, the thinning process should be particularly attended to. It comes to maturity in July or August.

The harvesting process is the most critical. The crop must be cut with a sickle, or hook, and with care, to prevent the loss of seed, which wastes under careless management; and it should be threshed, in the field, or barn, without delay, and without being put into stack, or mow. In moving it to the threshing floor, either a perfectly tight box to the wagon, or cart is required, or a large cloth should be spread upon the bottom, and extended over the sides, so as to catch all the seeds that fall out. The harvesting should be made in good weather, and as many hands be employed as can work to profit.

The product, under favorable circumstances, is forty, or fifty bushels, or more, of seed to the acre. The seed is crushed for oil, in the same way as lint, or flax-seed, and never sells for less, in England, than £30, the last of ten quarters, which is about $1,66 to $1,70 the bushel. Marshall says it may be considered as one of the most profitable crops in husbandry. There have been, says he, instances, on cold unproductive old pasture lands, in which the produce of the rape crop has been equal to the purchase value of the lands. The oil is burnt in lamps, and is used for various other purposes; but is liable to become rancid; but by being purified it is almost entirely divested of color, smell and taste, so that it will burn clear without any interruption.

Independent of the value of the seed for oil, and of the leaves as winter food for sheep, the rape crop affords other sources of profit. Rape cake constitutes a valuable material for manure. The English break it into powder, and sow it broad cast upon clover, or deposite it, at the rate of four cwt. to an acre, in drills with turnep seed. The Flemings throw it into their urine cisterns, where it dissolves, and adds materially to the fertilizing properties of the liquid. In Holland it is almost exclusively used for feeding milch cows and other farm stock; and, if we mistake not, quantities are annually exported to England, under the name of oil cake, for a like purpose. The haulm is burnt by the Flemings, and the ashes, which are alleged to be equal to potash, are employed as manure. The English condemn this practice, and say that the haulm, or straw, is as acceptable to cattle as hay; and the Lincolnshire corrected report adds, that when grown on fresh land, the stalk is as brittle as glass, and is superior to every other kind of food in fattening sheep.

Rape has been raised, on a limited scale, by some foreign emigrants in our neighborhood, to afford autumn feed for sheep, but never, as we can learn, for the seed. And indeed seed has been kindly sent to us for trial, but the multiplicity of our avocations have prevented our giving it a trial. A principal obstacle, at present, to its culture among us, would be the want of mills to crush the seed.

We tender our thanks to Mr. Kennedy, for calling our attention to the subject; and shall be happy to be advised of the further progress of the culture in his neighborhood.—*Cultivator.*

On Manures, and their Application to the Soil.

Wood ashes, leached and unleached, are a valuable manure, and placed in large quantities on light and sandy loams they alter permanently the quality of the soil, rendering it more adhesive, more retentive of moisture, and consequently more protective of stable manure subsequently applied.

It is a very common notion that ashes should be applied to moist soils, in order to render them drier. This is clearly a mistake. Though ashes in small quantities assist the vegetable growth in all soils, they never should be laid on low heavy lands—they contribute to make such lands in time, more heavy still. Ashes operate in two ways. The ley from those that are strong, is a very powerful decomposer of vegetable substances. It is from this cause that we see so marked a difference, when applied under different circumstances. On green sward newly turned, and full of grass and their roots, strong wood ashes have a powerful effect. They very rapidly decompose these substances and convert them into active manures. When applied to old fields, destitute of roots, &c., as we often apply them by the single handful to a hill of corn, they seem to be of little use, there being nothing on which they can operate. They only serve to render the soil more compact and adhesive, but the quantity thus used is too small to produce a sensible effect by way of a permanent amendment of the soil. But leached ashes may often be purchased at such a rate as to justify the application of them to light loams, in such quantities as to render a material alteration in the quality of the soil. Thirty or forty cart loads to the acre will often improve such a soil, not by virtue of the ley that may remain in them, but of the heavy earthy matter, the dregs that serve to render the whole soil more retentive of moisture. But as the ley that may still remain in them, in small quantity, will not avail perceptibly, unless the application be made on green sward, or other vegetable matter, these leached ashes may not be worth more than so many loads of clay on a sandy soil; for without their ley they operate mechanically only, and not as a stimulant, or a decomposer of vegetable matter. Therefore, leached ashes perfectly drained of their spirit of ley, can hardly be counted as a manure, serving only the office of a component part of the soil.

That wood ashes, unleached, have the effect, before stated, of rapidly decomposing vegetable substances when applied to them, will be evident, not only from the different effect they produce on green sward compared with soil long under cultivation; but we can show merely by applying these substances to a tub of strong ley, that it has a most powerful and rapid action on them, decomposing them totally in a very short time.

Yarn put into a bucking tub to be whitened, will soon be spoiled if the ley be strong, and it is a maxim with those concerned in the process, "that the yarn must not remain there long."

A few years since, my boy was set to wash the apple trees with ley. He made it very strong; he used a new paint brush made of bristles. In less than two hours, the brush came to pieces. It was completely decomposed, or rotted; it was, in that short period, turned to manure. A strong piece of woollen cloth was afterwards used. This shared the same fate with the brush, and in less time. W. B.

Framingham, Dec., 1838. [*Yankee Far*

Swamp Muck for Manure.

Haul out swamp muck upon dry, sandy, or gravelly soils, and our word for it, you will receive ample compensation, whatever your crop may be, whether of grain, or grass, or roots. A farmer informs us, that by way of experiment, he hauled a few loads of swamp muck upon grass land, of gravelly soil, where, on account of its lightness, but very little grass had before grown.—The result was, that a great difference could be seen throughout the season, until the grass was cut; herds-grass grew to double the height of that where no muck was spread, and some of the heads were of the astonishing length of ten inches! The difference in the growth of the grass he does not attribute so much to the strength of the muck, as to the greater radiation of heat on account of its extreme black surface, whereby the grass

was brought forward some two or three weeks earlier in the season than it would have been, had no muck been spread upon the land. The determination of the cause, however, is not of so much consequence, as the fact, that important results were produced by the application. The muck was spread upon the land to the depth of about two inches. Let those who have the means, extend the experiment and make known their success.—*Windham Co. Democrat.*

From the Farmers' Cabinet.

Planting Trees.

Those who won't dig, must beg, and those who won't plant, should not be permitted to partake of the fruits of other men's planting.

All of us have partaken of the fruits of the labors of those who have preceded us, and we are all under obligations to render some service to those who may succeed us.

The labor and expense of planting and rearing a few fruit and ornamental trees, and shrubs, is so trifling, that no one would suppose that the most indolent and penurious person in the community could be deterred by it from procuring and setting out a dozen or more the ensuing spring.

There is a pleasure and satisfaction connected with the performance of such a duty as this, which furnishes an ample compensation for the expenditure of muscle and money, independent of any benefit to be hereafter derived from it.

No person, it is believed, ever planted a fruit tree, or grape vine, without feeling a secret consciousness that he had rendered a service of an important character either to his own family, or to others that might come after him.

It is the peculiar characteristic of the truly pious and good, to take pleasure in promoting and increasing the comfort, the happiness and the interests of their fellow men.

"There is no part of husbandry which is more commonly neglected than that of planting trees, without which they can neither expect fruit, ornament or delight from their labors. But they seldom do this till they begin to grow wise, that is, till they begin to grow old, and find by experience the prudence and necessity of it.—When Ulysses, after a ten years absence, was returned from Troy, and found his aged father in the field planting trees, he asked him, 'Why, being now so far advanced in years, he would put himself to the fatigue and labor of planting that, of which he was never likely to enjoy the fruit.' The good old man, taking him for a stranger, gently replied, 'I plant against my son Ulysses comes home.' The application is obvious, and instructive both to young and old."

Determine now, without delay, the trees and shrubs you will set out in the spring, ascertain where the best and handsomest can be obtained, and suffer no ordinary circumstances to prevent you from executing so important a determination, as that of doing some good in the world before you are called upon to give up your stewardship, which may possibly be before another annual period for planting trees comes round.

Let parents encourage their children, and children plead with their parents, to progress with the good work of planting fruit and ornamental trees, shrubs and vines, as soon as the spring opens; and then our farms and farm houses will soon exchange that dull, comfortless aspect, which is so obvious in many places, for a more cheering and exhilarating exhibition of the fruits of industry, care and good taste, and travellers as they pass by, will enquire,

Who dwells in this delightful place
Distinguished for its perfect grace?

R.

POULTRY.

The rearing of poultry produces much profit on a small investment.—Those who increased their stock of poultry during the last year, have been reaping a rich reward in return for their increased attention to this interesting branch of domestic economy. It has brought a very generous price, and eggs have not been less liberally paid for. Many chubby boys and rosy cheeked girls have often had their heart made glad, when "father" has returned from market, and announced the grand price for which he sold the turkeys, the ducks, the chickens and the eggs; for there is in many farmers' families a perquisite arising from sales of this description of stock, which enures to the younger branches of the family as a reward for their ingenuity, care and industry, in attending to the rearing and protecting the poultry, and an encouragement to future good conduct and obedience.

The multitude of grass-hoppers which inundated the country last summer, with myriads of other insects, furnished an abundant supply of meat for the fowls without apparently reducing the supply of it, and there was but little necessity for giving them other descriptions of food during the season. A farmer who regularly attends market, sold, during the last year, poultry and eggs to the amount of about one hundred and fifty dollars, and the expense incurred in their production was so small as scarcely to be appreciable; this should encourage others to do likewise, and they will have their reward proportionate to their works.

Guinea fowls make an agreeable variety in a poultry yard, and they furnish more eggs than common hens; they sell well in market without being picked, and their vigilance in guarding against danger, and the great alarm they sound when it approaches, so terrifies the hawk, that he rarely ventures to pounce on a chicken when guinea fowls are in the vicinity. Some people rear and keep them on purpose to guard the poultry from the depredations of their enemies, and it is thought they find their interest promoted by it. Rome was once preserved, it is said, by the noise made by geese producing an alarm amongst the inhabitants in time to preserve them from their enemies, who were approaching. The writer of this recollects a case that occurred many years since of a barn being preserved from being fired by an incendiary, by a flock of geese, which were aroused from their slumbers by him as he was about to execute his vile purpose: this was afterwards testified to by an accomplice in the intended mischief. I state these facts in order to let young people know that geese have been of some use in the world besides furnishing us with good feather beds, and quills to make pens.

Those who design to profit by rearing poultry the approaching season, should give attention to it early in the spring and follow it up with vigilance and care until the young ones are well feathered, when they will require but little attention. There should be always a shelter provided for fowls whether they be old or young, and those farmers who are destitute of winter quarters for their poultry, should not let another season pass by without making suitable provision to protect them from the inclemency of the weather; for with proper winter protection, eggs would be abundant all the year, and what pays a better profit than eggs?

—[*Farmers' Cabinet.* OVA.

From the New England Farmer.

Crop of Corn.

With the subjoined letter I received a trace of as beautiful ears of corn, of the Dutton variety, as I have ever seen, and was assured that it was only a fair specimen of the crop. The letter is a private one, but I hope the liberty I take in publishing it will be excused. The suggestions in regard to coal ashes, or ashes as a preventive of the ravages of the wire worm; and the use of manure from salt hay are deserving of attention; and will, I hope, lead to the disclosure or observation of other facts of a similar nature; and which should be given to the public as contributions to the general stock of agricultural knowledge. H. C.

West Needham, February 15th, 1839.

To the Commissioner of Agricultural Survey,—

DEAR SIR,—I send you a sample of some corn which was grown the last season, the seed of which I obtained from Judge Buel. He sent me two bushels of ears of the Dutton corn. I received it last April, let a neighbor have one half, the other half I shelled; had half a bushel, and planted it between the 14th and 20th May, on three acres of ground; one half acre of it came up well, the remainder two and a half acres, the yellow wire worm, as we call them, destroyed one third part of the corn that was planted, by eating into the kernel just after sprouting. Some part of the ground where the worms ate, I planted the second time, but it did not amount to much. On the half acre that the worms did not infest, I had thirty-six bushels. On the three acres together I had one hundred and fifty bushels of shelled corn according to measurement. The reason I assign, for the worms not eating in the half acre, is, that the manure that was put into the hill was mixed with hard coal ashes. The whole three acres were in one piece, and manured in the hill about five cords to an acre of barn manure and pond muck mixed in compost, except the half acre that was mixed with ashes. The land is what we call plain land; loamy soil not in high cultivation. The corn was not fit to harvest until September. Although the season was very dry the corn was green through the season. I did not know a leaf to roll, when adjoining fields suffered very much with the drouth. I assign the reason partly to the soil and ploughing deep; and partly to the barn manure which is made a considerable part from salt hay.

Yours, with respect, BENJ. SLACK.

MR. HENRY COLMAN.

Silk Culture.

We have received three books on the Silk Culture from Mr. Kenrick, Mr. Cobb and Mr. Whitmarsh, one from each; of which the first moment of leisure we shall give an account. The silk business, properly so speaking, can be expected to make very little progress, while the mulberry tree speculation is going on. This speculation, however, may be expected indirectly to aid the silk business; as it will fill the country with the first requisite, the means of supporting the "operatives."—While this speculation however is rife, every species of fraud, which can be introduced into it, will be likewise going on in a kind of "under-tow;" and many vexatious disappointments may be looked for. We have already heard of frauds in this matter, with men who claim to be respectable, which make us blush for human nature. We say to those who are disposed to engage in the business with a view to ultimate and reasonable success, "keep yourselves cool; look before you leap; wait until the boat gets to the wharf before you spring for the shore; and be sure when you do jump, that it is solid land on which you intend to place your feet and build your fire; and not on Sinbad's island which proved only the back of a floating whale. The silk business is certain to succeed in the country, only as every other business that is worthy of success can succeed, by knowledge, skill, prudence, frugality, perseverance and industry; but the idea, which really seems to have addled the brains of some men, of planting a morus multicaulis tree at night, and going out the next morning and finding half a dozen pair of silk gloves and hose with laced cloaks dangling from the branches, and perhaps, if the wheel of fashion has got far enough round for that, to find besides a pair of black silk breeches, with diamond knee buckles fastened to the strap on the same tree, partakes a little too much of the romantic for such sober people as we are to encourage.

Mr. Whitmarsh's opinions are professedly grounded upon experience and observation. His experience is eight years old; and his observation embraces the best silk district in France and Italy. He states one fact with emphatical distinctness; that the seed of no mulberry can be expected with confidence to produce its like; and though he does not commit himself by naming any *particular* tree, the inference from his advice and observation is strongly against the morus multicaulis for our northern latitudes. Our columns are open to any fair and calm discussion of these matters. H. C.

—[*New England Farmer.*

From the Yankee Farmer.

Making and Preserving Butter

MR. EDITOR,—If you think the following of sufficient interest to the public, you are at liberty to insert the same in your valuable paper. I have thought for many years, that the manufacture of butter, is an art which will admit of much improvement by most of the dairy people of our country; perfect rules, on chemical principles, should govern every action in the dairy room, for the whole process from beginning to end, is governed by that science. I am aware, sir, that I may differ in opinion from some of my brother dairymen with regard to some of the chemical principles which are brought into action in the churning process. But after all, from having directed my attention (formerly for a good many years,) to this subject, and having tried more than thirty different processes, and more than fifty variations, I have settled down on what I call the best method of making and preserving that prime article of food. If, however, any brethren of the craft shall think me in an error, I will receive tender reproof kindly and go on with the argument.

My method of making and preserving butter is simple and easily done, when once well understood. Perfect regularity and cleanliness is absolutely necessary in all matters and things that have any concern in, or relation to the dairy. Even the food given to the cows communicates its peculiar flavor to the butter. The best butter is made of the cream raised in the shortest possible time after it is drawn from the cow, and the poorest is made of the cream which rises last.

Cream raised by having been heated by steam or hot water soon after the animal heat has passed off from the milk, and the cream beginning to rise, with a free ventilation of cool wholesome air is the best. The process of heating should be accomplished in five or six minutes; then the pan should be placed in cold running spring water to cool; as soon as cold, the pan of milk should be raised from the water on to a dry bench and skimmed in six, twelve, and eighteen hours. In this way I get three qualities of butter, the first worth 38 cts., the second 19 cts, and the third 9 or 10 cts. I mean to say this is the comparative value of each skimming by the pound. The first skimming will produce by far the greatest quantity, and the last will be a small yield. The first will be pure oil, and of an exquisite flavor, the last a gluey substance, and insipid in taste.

The next process is churning, which is always done in my dairy in the morning, the cream having been placed in the ice house, or suspended in the well over night (in hot weather) to bring it to a proper temperature not to come soft and white. This done, the buttermilk is worked off by a lever or ladle, and salted a little

more than to make it palatable, so that when worked again the next day 24 hours after churning, the salt will all have dissolved, and the butter ripened and ready for the tub or table.

Now comes the process of packing the butter into a clear white oak tub or firkin, lined on the inside with a perfect bag, saturated with hot bees' wax, so as to fill every pore of the cloth and prevent the escape of the least particle of the treasure that is contained within, or admit the least possible substance from without. In this bag the buttter is to be pressed in solid layers, an inch or two in thickness (without adding salt or any other preservative) until the firkin is full. Now the bag is closed perfectly tight and the firkin headed up, and all the interstices between the bag and timber filled up with strong brine made of solar evaporated salt. Butter made and preserved in this manner may be carried into any part of the world without injury; for in the process of churning the acidifying principle gains no power of action on the oil, and the oxygen combines with the gluten and whey only; and by being thus laid down in wax, perfectly secures the oil or butter from the action of that decomposing and putrifying principle, and the milk remaining perfectly sweet may be converted into skim milk cheese.

Respectfully yours,

Salisbury, Vt. JOHN M. WEEKS.

Mr. HOWARD,—In your department of the Zanesville Gazette of week before last, I noticed a recommendation of Arsenic, (ratsbane,) as a remedy for the kidney worm in hogs, and as I believe it is the true policy of agricultural publications to register experiments, as it is also of agricultural readers to report the result of experience and observation for publication, I beg leave to state what I have seen done in that matter.

In the neighborhood in which I reside, cases of kidney worm in swine, have been common, and in several instances the arsenic has been tried without effect, though, so far as I know, no injury resulted to the animal, except in one instance. I am not prepared to say that the arsenic was good, but from hearing it spoken of by different individuals, I take for granted that different parcels must have been used. The remedy which my neighbors have found most successful, and which I have tried myself, is *strong ley*, made of wood ashes. It has been found most convenient to administer it by giving the animals, as food, oats that have been boiled in ley; the hogs eat it freely, and it is here considered a certain cure. They very soon improve and being thus fed twice a week for a few weeks, have invariably, so far as I know, recovered.

A GUERNSEY FARMER.

Feb. 9th, 1839.

P. S. A few weeks since I noticed that one of my cows was afflicted with the hollow horn, and calling on a neighbor to help me bore the horn; he advised that as the weather was cold, I should try putting nearly a teaspoonful of copperas on her feed three times a week instead of boring her horns. I have tried it, and find the cow is better; whether it will effect a cure, time will soon determine.

The article on the use of arsenic for cure of the kidney worm in swine, which we inserted in a previous number, was copied from the Genesee Farmer. We gave no opinion on the subject, but simply stated, that the writer was a frequent correspondent of that paper, We have never seen but one case of the disorder alluded to, consequently know nothing of it from experience, though it is, as we understand, of common occurrence here.—The use of ley of wood ashes, as mentioned by our correspondent above, is also recommended by a distinguished farmer of this neighborhood with whom we have just conversed on the subject, and whose communications have sometimes appeared in print over the signature of "*Muskingum Farmer.*"

The same gentleman has also acquainted us with what he considers a certain remedy for another disorder in swine, which we understand is often prevalent in this vicinity, called "*sore throat.*" He says he one year lost eight fine hogs with this complaint—that he tried almost all remedies without effect. At length, on the recommendation of some one, he was induced to try what at first seemed to him a severe medicine—viz: to turn down the throat of the hog about a quart of lard heated *hot*—as hot, he says, as it *can be made.* This medicine he has often tried, and has never known it fail. To use his own expression, "the hot lard *kills the disorder* and there is nothing left but the *scald*, and nature soon effects a cure of that.—*Zanesville Gaz.*

In transplanting fruit trees, the trunk should slightly incline toward the south-west, so that it may be shaded from the hot rays of the summer's sun.

He is worse who does on work days what he might do on holidays: and

He is worst of all who, in a clear sky, works within doors rather than in the field.

Improved China and Berkshire Pigs.

THE subscriber keeps constantly on hand and for sale the above very superior hogs. They are the very choicest kinds of England and America, and are universally preferred by all who pay the least attention to the improvement of their stock.

The Berkshires are large, easily weighing 400 to 600 lbs., according to keep, at 18 months old, and grown hogs of this breed have been sold the past year in Kentucky from $200 up to $300 per pair. The China are a smaller race and much finer in their points than the Berkshire, and weigh at 18 months 300 to 400 lbs. They are celebrated for the delicacy of their meat, easiness to keep, and aptitude to fatten, and for producing a more rapid improvement in crossing with the common hog than any other breed known.

If called upon, the subscriber will give the most satisfactory reference of the perfect purity in blood of the above animals, and the superiority and care of his breeding, and residing as he does at the great shipping port of the lakes, Western gentlemen, in addressing their orders to him, will make a considerable saving in the charges of feed and transportation.

Prices of Berkshire pigs per pair, 6 to 8 weeks old, caged and shipped,.....$20 00
China do.,.....15 00

When taken at the farm without box, $2 per pair less will be charged. Crosses of the above with each other called the Tuscarora, and in England the Tonkay breed, at 15 to 20 dollars per pair.

Pigs will not be considered as engaged unless the amount of them is remitted at the time of ordering, or reference given. *Address, post paid,* A. B. ALLEN.

Buffalo, March, 1839.—mar 9-m3t w9t

Morus Multicaulis.

FOR SALE—One thousand five hundred genuine Morus Multicaulis trees, with cuttings on them; they are of thrifty vigorous growth, the wood well ripened. They are choice trees.

Also, 10,000 Morus Multicaulis cuttings for sale, if applied for soon.

Fruit and Ornamental Trees, Shrubs, Green House Plants, &c. for sale as usual. ASA ROWE.

Greece, Monroe Co., March 7th, 1839. m1tw6t

New Arrangements.

THE subscriber would respectfully inform the public, that he has taken the entire management of the Rochester Seed Store. Having had seven years' experience in the business in this place, he flatters himself that his knowledge of the wants of the community, and his facilities for supplying those wants, will enable him to give the fullest satisfaction, and secure for the establishment a continuance of that public confidence and liberal patronage which it has hitherto received.

He has now on hand a very large assortment of English and American Garden, Field and Flower Seeds, of the best kinds and latest growth, and several tons weight additional will be received direct from England on the opening of navigation.

The regular agents for the establishment will be supplied immediately.

Catalogues may be had gratis on application.

Rochester, March 1st, 1839. M. B. BATEHAM.

Cleveland City Seed Store,

AND WESTERN RESERVE AGRICULTURAL REPOSITORY, No. 91 SUPERIOR STREET, CLEVELAND, OHIO.

The subscriber, in introducing to the Public notice, the above establishment for its second year, takes pleasure in being able to state that from the apparent good feeling entertained of the advantages of such a Store to the State of Ohio, and the neighboring, States, he has greatly extended its sphere of usefulness, by adding to it a much more general assortment of all the valuable varieties of CLOVER, GRASS, ESCULENT ROOTS, and FIELD SEEDS, GARDEN, FLOWER, SHRUB and TREE SEEDS. And he has made such arrangements with his connections in Europe, as will ensure the early introduction into Ohio, of all new and desirable varieties that will be suited to this climate, and that he will invariably continue to offer only imported seeds that have been confirmed by experience to be better adapted to our use, than the same varieties raised in America. He particularly calls attention to his choice stock of GARDEN AND FIELD PEAS, TURNIPS, RUTA BAGA, SUGAR BEET, and MANGEL WURTZEL SEEDS—all imported from the best Foreign sources. He has added an AGRICULTURAL IMPLEMENT DEPARTMENT, consisting of Ploughs of various patterns, also Plough Castings, Cultivators, Drill Barrows, Hay and Straw Cutting Machines, Root Slicers, Harrows, Scythes, Cradles, Reaping Hooks, Rakes, Forks, and Grindstones of superior fine grit, Garden Tools, as Spades, Rakes, Hoes, Garden Lines, Pruning Hooks, Knives and Chissels, Budding Knives, Watering Pots, &c. And a MISCELLANEOUS DEPARTMENT, consisting of Farming and Gardening Books, Silk and Beet Sugar making, Bulbous and Dahlia Roots, (Green House and Parlor Plants in the season,) Strawberry Plants, Raspberry Canes, Sweet Potatoe Sets, Rhubarb or Pie Plant Roots, Asparagus Roots, Cauliflower, Cabbage, Egg and Tomato Plants and Sutton's Double Dasher Churns, Improved Copper Pumps, Silk Reels, Silk Worm Eggs, and the genuine Morus Multicaulis or Chinese Mulberry Trees and Cuttings, with numerous other notions calculated to make the establishment deserving extended patronage; and the public may rely on being supplied with as PURE and GENUINE SEEDS as can be found in the eastern cities, New York not excepted. The subscriber desires no other confidence or patronage than what is fully merited, and as the establishment of a business of this nature is of considerable importance to aid the developement of the resources of the soil, he hopes the enterprise will be patronized far enough to make it a mutual benefit to him and the public. Ample support is necessary this year to ensure its continuance hereafter, and J. H. takes this opportunity of returning thanks to the public for past favors, and assures them, that their earnest desire to see it succeed, shall be more than equalled by his indefatigable exertions to deserve it. A liberal discount allowed to Retail dealers and Pedlars, and in no case will Seeds be sent out on commission. Catalogue of Vegetable, Flower and Field Seeds can be had gratis, on application to

JAMES HOUGHTON, General Agent.

CLEVELAND CITY SEED STORE, February 26, 1839. mar 9-f5t

Holland's Improved Silk Spinner.

THE attention of Silk Manufacturers is invited to the recent invention of an improved Silk Spinner, by Mr. Harrison Holland of this town, for which he has obtained letters patent. It is thought to possess many advantages over any machine now in use for the same purpose By its peculiar construction, it can be moved by hand, steam or water power,—and doubles, twists and spins the silk at one operation. For family use, or persons wishing to manufacture silk in a small way, it is undoubtedly the best invention in use, while it is equally well adapted for factories on the most extensive scale.

A machine in full operation may be seen, or for a more particular description of it reference may be had to a Circular published by the subscribers, which can be obtained by any one upon application either to HARRISON HOLLAND, or STODDARD & LATHROP.

Northampton, Mass. Feb. 27. mar 9-f6t

Morus Multicaulis.

FOR SALE—1,000 genuine Morus multicaulis.
10,000 cuttings do. do.
100,000 Silk Worm Eggs.

ELLWANGER & ROGERS, Florists and Nurserymen, offer at wholesale and retail, a general collection of Green-house and Hardy, Herbaceous Plants, Fruit and Ornamental Trees, Shrubs, Vines, Bulbous Roots, &c. &c.

Green-house corner of Buffalo and Sophia-streets, Rochester New York. March 9-3t

Morus Multicaulis.

A FINE lot for sale; also, a few English Hawthorn of large size, a very desirable lot, by S. MOULSON, Front-street.

February 27.

Rohan Potatoes.

THE subscriber has now in his cellar 150 bushels of Rohan Potatoes for sale; also about 200 bushels buried, which will be for sale in March, if not impaired by freezing, &c. Having cultivated this potatoe for the last *three* years, can now confidently state that they have fully sustained the very high reputation given of them by Prince Rohan, who first introduced them into France, in 1834 or '5.

Cattskill, Feb. 26, 1839.—f3t JOHN A. THOMSON.

WM. PRINCE & SONS will make sales of trees and cuttings of the genuine Chinese Morus multicaulis, Morus Expansa, Alpine, Broussa, Canton, and other varieties, deliverable to the purchaser at such period in the spring as is convenient to them, and will enter into contracts accordingly. Prices and terms for the trees and cuttings will be forwarded to all who may apply for them by mail, as well as prices of Silk Worm Eggs, Mulberry seed, &c. The Multicaulis Trees are remarkably vigorous, and as we first imported the genuine tree, purchasers are sure of obtaining the true kind. It is from this cause and from the great attention paid by them, that the trees they have sold have given universal satisfaction.

N. B. Fruit and Ornamental Trees, Plants and Seeds, can be supplied to any extent, and all articles will be packed so as to support any voyage and be forwarded in the most careful manner.

Flushing, near New York, Feb. 12, 1839. feb 23-10t

Morus Multicaulis Cuttings.

THE subscriber can furnish 10,000 genuine Morus Multicauli Cuttings if applied to soon. E. H. MIX.

Avon, Livingston Co., N. Y. an26 3m

Rochester Seed Store, 1839.

REYNOLDS & BATEHAM, the proprietors of this well known establishment, respectfully announce that they have again on hand a fine assortment of English and American SEEDS, of the latest growth, including all the most valuable and newly introduced articles of garden and field culture—Grain, Grass, Esculent Vegetable, Tree, Shrub, Herb and Flower Seeds. Also, a large collection of Garden Tools, Agricultural and Horticultural implements, Books, &c. and a splendid collection of Green House Plants.

The liberal and constantly increasing patronage which this establishment has received during the past four years, is a gratifying evidence that its usefulness is in a measure appreciated by an intelligent community, and that the efforts of the proprietors to give satisfaction have not been unsuccessful. Great pains are taken to have all articles sold at this establishment of the very best quality, and the proprietors hope, by unremitted exertion, together with their experience in the business, and facilities for growing and importing supplies, to merit the fullest confidence of the community, without which they do not ask or expect a continuation of its liberal patronage. Merchants and others supplied with superior Seeds either by weight at wholesale, or neatly put up in small papers for retailing, at prices which will afford them a handsome profit. Small Assortments will not be furnished on commission, but an agency is, or will be established in each of the principal villages in Western New York, where a full assortment will be left for sale.

A Catalogue of 42 pages may be had on application.

REYNOLDS & BATEHAM,

No. 3 & 5 Arcade Hall, Rochester, N. Y., Jan. 1st, 1839.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county state of New York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms.

April 15, 1838. SAMUEL MOULSON.

N. B. Cash will be paid for a few thousand two years old APPLE TREES.

For Sale.

A SMALL FARM, finely situated, and of uncommon productiveness, near a large village on the Erie Canal, and admirably adapted to the dairy business and marketing. For further particulars, and terms, inquire at this office. Dec. 29—tf

Monroe Horticultural Garden and Nursery,

GREECE, MONROE COUNTY, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with trees and plants in different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer

April 1, 1838. ASA ROWE.

Genuine Morus Multicaulis.

THE subscriber has still for sale, one thousand genuine Morus multicaulis, of thrifty growth and untrimmed. They are choice trees, selected for their size, and will afford a large quantity of cuttings. ASA ROWE.

Greece, October 27th, 1838.

Books for Farmers.

CHAPTAL'S Agricultural Chemistry, price $1 25.

A Treatise on Cattle, their breeds, management and diseases, price $2 50.

The First Volume of the Genesee Farmer, bound, price $1 50.

The Farmers' Own Book, price 50 cents.

The American Farriery, price 75 cents.

Feb. 2. D. HOYT.